**GOVERNMENT OF INDIA**
**NON-CONVENTIONAL ENERGY SOURCES**
**LOK SABHA**

UNSTARRED QUESTION NO:3754
ANSWERED ON:22.03.2001
FOREIGN INVESTMENT IN DEVELOPMENT OF NON-CONVENTIONAL ENERGY
ALE NARENDRA

**Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:**

(a) the details of proposals received from foreign companies to invest in the field of development of Non-conventional Energy during the last three years, year-wise ;

(b) whether the Foreign Investment Promotion Board (FIPB) has cleared some proposals in this regard;

(c) if so, the details thereof and the areas identified therefor, State wise ; and

(d) the details of foreign companies already involved in this field?

## Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE), (SHRI M. KANNAPPAN)

(a),(b)&(c): During the last three years Foreign Investment Promotion Board, Government of India approved nine proposals for foreign investment in the non-conventional energy sector. The proposals have direct foreign investment component of about Rs. 344 crore. It include Rs. 24 crore in wind energy area, Rs. 29 crore in solar PV, Rs 175 crore in waste to energy and the balance for general renewable energy areas. The details of the proposal approved are given at Annexure-I.

(d): In addition to the proposals approved during last three years, FIPB had approved twelve proposals during 1994-95 to 1996-97. The details are given at Annexure-II. Besides there are technological cooperation projects also, which do not require any approval from Government. Such technological cooperation is mainly in the areas of solar energy, wind energy and new technologies.

Anneuxre -I referred to in reply to Parts (a),(b) & (c ) of the Lok Sabha Unstarred Question No. 3754 regarding Foreign Investment in Development of Non-conventional Energy by Shri A. Narendra for 22.03.2001.

FOREIGN INVESTMENT PROPOSALS APPROVED BY FOREIGN INVESTMENT PROMOTION BOARD IN RENEWABLE ENERGY DURING LAST THREE YEARS

| Programme | Collaboration Indian | Collaboration Foreign | Total cost (Foreign Equity) | Objective & states where projects are proposed to be set up | Year |
|---|---|---|---|---|---|
| **1.WIND ENERGY :** | | | | | |
| i) Enercon wind farm India Ltd. | -do- (74%) | | Rs. 30 crore | The proposal is for setting up of independent wind farm in states of Karnataka. No progress has been made. | 2000-2001 |
| ii) Pioneer Wincon Ltd | Wincon A/s Denmark (30%) | | Rs. 4.00 crore | The proposal is for manufacturing of wind operated elecctriciy generator in the state of Tamil Nadu. The company is engaged in manufacturing. | 1999-2000 |
| **2. SOLAR PHOTOVOLTAIC :** | | | | | |
| i) M/s Global Energy Enterprises India Pvt. Ltd. | M/s Plum Street Enterprise Inc. USA (100%) | | Rs 4.00 crore | The proposal is for setting up a wholly owned subsidiary in India which will identify and develop business opportunities in Indian Energy Sector and also to Provide technical and managerial solutions for Indian Energy Sector. The activities also include manufacturing, designing, developing, installing , exporting, selling non-conventional energy systems particularly Solar photovoltaic cells and modules and providing technological and managerial solutions in the related fields including generation and distribution of Solar Energy. Factory has been set up in Gurgaon, Haryana. | 1998-99 |
| ii) Solar Electric Power Company Ltd. | Solar Electric Light Fund & M/s E& Co., (100%) | | Rs. 3.80 crore | The proposal is for promotion of Solar Lighting Systems in rural areas of Karnataka & Andhra Pradesh . The foreign equity has been utilised and the project is in progress. | 1997-98 |
| iii) Royal Dutch/ Shell groupC/o Dua Associates, New Delhi | Royal Dutch/Shell UK (100%) | | Rs 9.87 crore | The proposal is for manufacturing of SPV systems, packaging, distribution and after sales service of SPV energy systems. The company is setting market outlets in different part of India. | 1998-99 |
| iv) Mahrishi Solar New Delhi | Mahrishi Technology CorpnBV Netherland (99%) | | Rs. 10.60 crore | The proposal is for upgradation of solar technology in India. Production facility has been set up in Andhara Pradesh and commercial production is in progress | 1999-2000 |
| v) M/s STECA India Solar Pvt. Ltd. Mr. Cavstar Michelson | M/s Helix Solarelektronik Gmbh & (100%) | | Rs. 20 Lakh | The proposal is for planning, design and engineering of solar energy system and products in the state of Tamil Nadu. No progress has been made. | 1999-2000 |
| **3. MUNICIPAL SOLID WASTE INTO ENERGY :** | | | | | |
| i) Super Stone Inc. C/o Super Stone Inc. 17W, 45th Street sorte, 304, New York NY 10036. | | | Rs. 175 crores (100%) | The proposal is for setting up of a project for conversion of 1500 TPD municipal solid waste into 35000 gallons of ethanol per day in the state of Maharastra . No progress has been made. | 1997-98 |
| **4. GENERAL** | | | | | |
| i) - | M/s Guascor S.A., Spain (100%) | | US $ 26 million | The proposal envisages establishment of a wholly owned subsidiary in India. The activities include setting up, developing, owning and operating micro energy power plants up to 25 MW inter-alia using renewable energy sources to provide engineering, start up, operation and management, equipment procurement and consultancy services and also to act as a holding company to make downstream investments in joint venture projects in the power sector with Indian partners.The company has identified potential projects for Biogas from landfills, rice husk gasification, minihydel and cogeneration in different states of the country. No progress | | 1998-99 |

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has been made.

Annexure-II

Anneuxre -II referred to in reply to Part (d) of the Lok Sabha Unstarred Question No. 3754 regarding Foreign Investment in Development of Non-conventional Energy by Shri A. Narendra for 22.03.2001.

FOREIGN INVESTMENT PROPOSALS APPROVED BY FOREIGN INVESTMENT PROMOTION BOARD DURING 1994-95 to 1996-97

| Programme | Collaboration Indian | Foreign | Total cost (Foreign Equity) | Objective & states where projects are proposed to be set up | Year |
|---|---|---|---|---|---|
| 1.WIND ENERGY : | | | | | |
| i) LM Glass fiber(I) Ltd. | LM Glass Fiber Denmark & The Industrialisation Fund for developing Countrying (IFU), Denmark. | (75%) | Rs. 12.60 crores | Production of blades for Wind Electric generators in the State of Karnataka. | 1995-96 |
| ii) Aban Loyd Chiles Offshore Ltd., Chennai. | Subsidiary of Kenetech, USA. owned Indian subsidiary. | 100% equity | Rs. 3.15 crores | Assembly & construction of Wind Power projects in the State of Tamil Nadu. | 1995-96 |
| iii) Enercon (India Ltd.) | Enercon GMBH Germany. | (56%) | Rs. 1.26 crores | Manufacturing of Wind operated generators in Daman & Diu. | 1995-96 |
| iv) M/s Micon | M/s Micon, Denmark 100% equity. | | Rs. 10 crores | For assembling & constructing Wind Turbine in the State of Tamil Nadu. | 1996-97 |
| 2. SOLAR PHOTOVOLTAIC : | | | | | |
| i) Solar Tech. India Ltd. | Hileos Italy | (40%) | Rs. 56.00 lakhs | Manufacture of Silicon Wafers in the State of Rajasthan. | 1995-96 |
| ii) Eco Solar Systems India Pvt., Pune | Mr. Conard Jauslin etl., Switzerland | (14%) | Rs. 65.00 lakhs | Establishment of manufacturing facility for alternate material Solar Cell in the State of Maharashtra. | 1995-96 |
| iii) Arvind Micro Electronics Pvt. Ltd. | Sun Power Technik Gmbh, Germany | (25%) | Rs. 1.00 crore | To set up a unit for manufacturing of Power conditioning equipments and instrumentation for Solar Photovoltaic and other non-conventional energy applications in Distt. Rangareddy in the State of Andhra Pradesh. | 1995-96 |
| iv) Solar Electric Power Company Ltd. | Solar Electric Light Fund & M/s E& Co., | (60%) | Rs. 10 lakhs | Promotion of Solar Lighting Systems in rural areas of Karnataka & Andhra Pradesh. | 1996-97 |
| 3. BATTERY OPERATED VEHICLES : | | | | | |
| Pearless Developers Ltd., Calcutta. | Frazer Nesh, U.K. | (18%) | Rs. 20 crores | Manufacture of Solar Passenger transport vehicle powered by batteries and supplemented Photovoltaic charging in the State of West Bengal. | 1994-95 |
| 4. COGENERATION PLANT WITH WOODY BIOMASS : | | | | | |
| M/s Desi Power Orchha Pvt. Ltd. | M.s FREND Switzerland | (49.2%) | Rs. 21.9 lakhs | Setting up of decentralised cogeneration power plant of 125 KVA on Wood Biomass Gasifier captive requirements of paper units and other rural units in Togram, Distt. Tikamgarh, Madhya Pradesh. | 1996-97 |
| 5. MUNICIPAL SOLID WASTE INTO ENERGY : | | | | | |
| i) M/s Future Fuels Engg. India Pvt. Ltd. Kalyan City, Maharashtra. | M/s Eco Technology JVVOY, Finland | (51%) | Rs. 2.91 crores | For manufacture of Municipal Solid Waste treatment plants in the State of Maharastra. | 1996-97 |
| ii) M/s WAS (I) Pvt. Ltd., New Delhi. | Mr. Jaishankar Menon Germany. | (51%) | Rs. 25 lakh | For providing technology, supply, erection of equipment of non-conventional energy system & waste management. | 1996-97 |